

ORAL ARGUMENT NOT YET SCHEDULED

**IN THE UNITED STATES COURT OF APPEALS
FOR THE DISTRICT OF COLUMBIA CIRCUIT**

No. 11-1141 (and consolidated cases)

AMERICAN CHEMISTRY COUNCIL,
Petitioner,

v.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY,
Respondent.

Petition for Review of Final Administrative Actions of the
United States Environmental Protection Agency

PROOF OPENING BRIEF FOR ENVIRONMENTAL PETITIONERS

Neil Gormley
James S. Pew
Earthjustice
1625 Massachusetts Ave., N.W.
Suite 702
Washington, D.C. 20036-2212
(202) 667-4500
ngormley@earthjustice.org
jpew@earthjustice.org

*Counsel for Louisiana Environmental
Action Network, Sierra Club, Clean Air
Council, Partnership for Policy
Integrity, and Environmental Integrity
Project*

DATED: August 26, 2014

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AMERICAN CHEMISTRY)	
COUNCIL,)	
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Petitioner,)	
v.)	Case No. 11-1141
)	(and consolidated cases)
UNITED STATES)	
ENVIRONMENTAL)	
PROTECTION AGENCY,)	
)	
Respondent.)	

**ENVIRONMENTAL PETITIONERS' CERTIFICATE AS TO PARTIES,
RULINGS, AND RELATED CASES**

Pursuant to D.C. Circuit Rule 28(a)(1), Louisiana Environmental Action Network, Sierra Club, Clean Air Council, Partnership for Policy Integrity, and Environmental Integrity Project (collectively, "Environmental Petitioners") hereby certify as follows:

(A) Parties and Amici

(i) Parties, Intervenors, and Amici Who Appeared in the District Court

This case is a petition for review of final agency action, not an appeal from the ruling of a district court.

(ii) Parties to This Case

Petitioners:

11-1141 American Chemistry Council

11-1182 Sierra Club

11-1207 American Petroleum Institute

11-1208 Council of Industrial Boiler Owners

13-1105 Louisiana Environmental Action Network , Sierra Club, Clean Air Council, Partnership for Policy Integrity, Environmental Integrity Project

13-1107 Council of Industrial Boiler Owners, American Chemistry Council, American Wood Council, American Forest & Paper Association, Southeastern Lumber Manufacturers Association, Inc., Corn Refiners Association, National Association of Manufacturers, Rubber Manufacturers Association, Chamber of Commerce of the United States of America

Respondents:

The respondent in all cases is the United States Environmental Protection Agency. Also named as a respondent in case nos. 11-1182, 11-1207, and 13-1105 is Gina McCarthy, in her official capacity as Administrator of the U.S. Environmental Protection Agency.

Intervenors:

American Forest & Paper Association, Clean Air Council, American Gas Association, Partnership for Policy Integrity, American Home Furnishings Alliance, Inc., American Iron and Steel Institute, American Wood Council, American Petroleum Institute, Biomass Power Association, Chamber of

Commerce of the United States of America, Corn Refiners Association, National Association of Manufacturers, Council of Industrial Boiler Owners, Energy Recovery Council, National Oilseed Processors Association, Rubber Manufacturers Association, Sierra Club, Society of Chemical Manufacturers and Affiliates, and Southeastern Lumber Manufacturers Association, Inc. have intervened on behalf of the respondent in these consolidated cases. Additionally, Hearth, Patio and Barbecue Association is a movant-intervenor on behalf of the respondent in these consolidated cases.

(iii) *Amici* in This Case

There are currently no *amici*.

(iv) Circuit Rule 26.1 Disclosures for Environmental Petitioners

See disclosure form filed below.

(B) Rulings Under Review

Environmental Petitioners seek review of final actions taken by EPA at 76 Fed. Reg. 15,554 (Mar. 21, 2011) and titled “National Emission Standards for Hazardous Air Pollutants for Area Sources: Industrial, Commercial, and Institutional Boilers,” and at 78 Fed. Reg. 7488 (Feb. 1, 2013), and titled “National Emission Standards for Hazardous Air Pollutants for Area Sources: Industrial, Commercial, and Institutional Boilers.”

(C) Related Cases

The Court has ordered these cases be heard by the same panel as will hear the following currently pending challenges to related rules:

United States Sugar Corporation v. EPA, No. 11-1141 (and consolidated cases)

American Forest & Paper Association v. EPA, No. 11-1125 (and consolidated cases)

Solvay USA Inc. v. EPA, No. 11-1189 (and consolidated cases)

Environmental Petitioners are unaware of any other currently pending related cases, apart from the consolidated cases.

DATED: August 26, 2014

Respectfully submitted,

/s/Neil Gormley

Neil Gormley

James S. Pew

Earthjustice

1625 Massachusetts Ave., N.W.

Suite 702

Washington, D.C. 20036-2212

(202) 667-4500

ngormley@earthjustice.org

jpew@earthjustice.org

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PROTECTION AGENCY,)	
)	
Respondent.)	

**ENVIRONMENTAL PETITIONERS' RULE 26.1 DISCLOSURE
STATEMENT**

Louisiana Environmental Action Network

Non-Governmental Corporate Party to this Action: Louisiana Environmental
Action Network ("LEAN").

Parent Corporations: None.

Publicly Held Company that Owns 10% or More of Party's Stock: None.

Party's General Nature and Purpose: LEAN is a corporation organized and existing
under the laws of the State of Louisiana. LEAN is a nonprofit organization which
works with citizens' groups throughout the state of Louisiana to develop,
implement, protect, and enforce legislative and regulatory environmental
safeguards.

Sierra Club

Non-Governmental Corporate Party to this Action: Sierra Club.

Parent Corporations: None.

Publicly Held Company that Owns 10% or More of Party's Stock: None.

Party's General Nature and Purpose: Sierra Club, a corporation organized and existing under the laws of the State of California, is a national nonprofit organization dedicated to the protection and enjoyment of the environment.

Clean Air Council

Non-Governmental Corporate Party to this Action: Clean Air Council ("CAC").

Parent Corporations: None.

Publicly Held Company that Owns 10% or More of Party's Stock: None.

Party's General Nature and Purpose: CAC is a corporation organized and existing under the laws of the Commonwealth of Pennsylvania. CAC is a not-for-profit organization focused on protection of public health and the environment.

Partnership for Policy Integrity

Non-Governmental Corporate Party to this Action: Partnership for Policy Integrity ("PFPI").

Parent Corporations: None.

Publicly Held Company that Owns 10% or More of Party's Stock: None.

Party's General Nature and Purpose: PFPI, a corporation organized and existing under the laws of the Commonwealth of Massachusetts, is a nonprofit organization that uses science, policy analysis, and strategic communications to promote sound energy policy.

Environmental Integrity Project

Non-Governmental Corporate Party to this Action: Environmental Integrity Project ("EIP").

Parent Corporations: None.

Publicly Held Company that Owns 10% or More of Party's Stock: None.

Party's General Nature and Purpose: EIP, a corporation organized and existing under the laws of the District of Columbia, is a national nonprofit organization that advocates for more effective enforcement of environmental laws.

DATED: August 26, 2014

Respectfully submitted,

/s/Neil Gormley

Neil Gormley

James S. Pew

Earthjustice

1625 Massachusetts Ave., N.W.

Suite 702

Washington, D.C. 20036-2212

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ngormley@earthjustice.org

jpew@earthjustice.org

Counsel for Environmental Petitioners

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GLOSSARY OF ACRONYMS AND ABBREVIATIONS

Pursuant to Circuit Rule 28(a)(3), the following is a glossary of acronyms and abbreviations used in this brief:

EPA	Respondents U.S. Environmental Protection Agency and Gina McCarthy, Administrator
GACT	Generally Available Control Technology
MACT	Maximum Achievable Control Technology
mmBTU/hr	Million British Thermal Units per hour
NACAA	National Association of Clean Air Agencies
NRDC	Natural Resources Defense Council
PFPI	Partnership for Policy Integrity

JURISDICTIONAL STATEMENT

Respondents U.S. Environmental Protection Agency and Gina McCarthy, Administrator (collectively “EPA” or “the agency”), have jurisdiction over the promulgation of emission standards and other requirements for industrial, commercial, and institutional area-source boilers (collectively, “area-source boilers”) under § 112 of the Clean Air Act, 42 U.S.C. § 7412.

Pursuant to Clean Air Act § 307(b)(1), 42 U.S.C. § 7607(b)(1), this Court has jurisdiction to review the final actions taken by EPA at 76 Fed. Reg. 15,554 (Mar. 21, 2011), JA____, and 78 Fed. Reg. 7488 (Feb. 1, 2013), JA____, and entitled “National Emission Standards for Hazardous Air Pollutants for Area Sources: Industrial, Commercial, and Institutional Boilers; Final Rule.” Petitioners filed timely petitions for review of these actions on May 20, 2011, and April 2, 2013, respectively.

STATUTES AND REGULATIONS

Pertinent statutes and regulations are in a separate addendum.

STATEMENT OF ISSUES

1. Whether EPA violated the Clean Air Act or acted arbitrarily by failing to set “maximum achievable control technology” standards under 42 U.S.C. § 7412(d)(2), or alternative health-based standards under 42 U.S.C. § 7412(d)(4),

for emissions of hazardous air pollutants from area-source boilers listed for regulation under 42 U.S.C. § 7412(c)(6).

2. Whether EPA violated the Clean Air Act or acted arbitrarily by setting “design, equipment, work practice, or operational standard[s]” that are not “consistent with the provisions of subsection (d) or (f) of [§ 7412],” as required by 42 U.S.C. § 7412(h)(1).

3. Whether EPA violated the Clean Air Act or acted arbitrarily by setting “generally available control technolog[y]” standards under 42 U.S.C. § 7412(d)(5) that do not reflect the use of generally available control technology.

4. Whether EPA arbitrarily concluded it would be “unnecessarily burdensome,” 42 U.S.C. § 7661a(a), for the largest area-source boilers to comply with Title V of the Clean Air Act.

STATEMENT OF FACTS

I. FACTUAL BACKGROUND.

A. Area-Source Boilers.

Industrial, commercial, and institutional boilers burn materials like coal, oil, and wood to produce steam or hot water. They also burn construction and demolition debris and other waste-like materials that EPA considers not-waste. EPA-HQ-OAR-2006-0790-2480 (“PFPI Comments”) at 3, JA____; *see generally* Definition of Non-Hazardous Secondary Materials that are Solid Waste, 78 Fed.

Reg. 9112 (Feb. 7, 2013), JA____. Approximately 187,000 of these boilers are located at “area sources” of hazardous air pollution nationwide.¹ 78 Fed. Reg. at 7489/1, JA____.

Area-source boilers range in size from very small to very large. The smallest have capacity of less than five million British thermal units per hour (“mmBTU/hr”). 76 Fed. Reg. 80,532, 80,536/3 (Dec. 23, 2011), JA____. The largest are more than 200 times that size, with capacity of over 1,000 mmBTU/hr. EPA-HQ-OAR-2006-0790-2333 (“MACT/GACT Memo”) at app. E-2b, JA____; PFPI Comments at 3, JA____. The area-source biomass boilers permitted in the last four years, in particular, “are mostly large, standalone electricity-providing plants.” PFPI Comments at 3, JA____. These large biomass power plants “overlap considerably in size with facilities designated as major sources.” *Id.* But because they plan to reduce their emissions below the major-source threshold using control technology, they are regulated as “synthetic” area sources. 75 Fed. Reg. 31,896, 31,913/1 (June 4, 2010), JA____. EPA has estimated that 48 area-source boilers are synthetic because of controls. *Id.* at 31,911/1, JA____.

¹ The Clean Air Act distinguishes between “major” and “area” sources of hazardous air pollution. A source is major if it emits at least 10 tons per year of any hazardous air pollutant or at least 25 tons per year of all hazardous air pollutants taken together. 42 U.S.C. § 7412(a)(1). A source is area if it is not major. *Id.* § 7412(a)(2).

B. Emissions Of Hazardous Air Pollutants.

In the aggregate, area-source boilers emit massive quantities of highly toxic pollution. Each year, according to EPA, they emit or will emit more than 285 tons of carcinogenic polycyclic organic matter, 4 tons of neurotoxic mercury, and 31,000 tons of other toxic metals, including lead, arsenic, manganese, cadmium, and selenium. EPA-HQ-OAR-2006-0790-2314 (“Impacts Methodology Memo”) at app. B-1–2, JA____-__; EPA-HQ-OAR-2006-0790-2312 (“Topham Memo”) at 16-18 (listing emissions of polycyclic organic matter by 16-PAH equivalent), JA____-__; EPA-HQ-OAR-2006-0790-0033 (“Fuel Switching Memo”) at tbl.2.2, JA____. They also emit significant quantities of deadly particulate matter, carbon monoxide, polychlorinated biphenyls, and acid gases like hydrochloric acid. Impacts Methodology Memo at app. B-1–2, JA____-__; 76 Fed. Reg. at 15,558/1, JA____.

Most of these pollutants are among the 30 hazardous air pollutants EPA has identified as presenting the greatest risk to human health in heavily populated urban areas. *See* 42 U.S.C. § 7412(k)(3)(B); 64 Fed. Reg. 38,706, 38,715 tbl.1 (July 19, 1999), JA____.² EPA calculates that area-source boilers account for a significant share of the total annual emissions of many of these most dangerous

² The final list is compiled at <http://www2.epa.gov/urban-air-toxics/urban-air-toxic-pollutants>, JA____.

pollutants, including 26 percent of total emissions of manganese, 10 percent of total emissions of arsenic and nickel, 15 percent of total emissions of polycyclic organic matter, and 5 percent of total emissions of polychlorinated biphenyls.³

These pollutants endanger human health. Mercury exposure impairs the neurological development of fetuses, infants, and children, affecting cognition, memory, attention, language, and fine motor and spatial skills.⁴ Non-mercury metals like arsenic, cadmium, manganese, and selenium cause skin irritation, respiratory impairment, and disorders of the central nervous system.⁵ Lead exposure damages children's nervous systems and causes various learning disabilities.⁶ Lead also builds up in the bloodstream and inhibits kidney and

³ 67 Fed. Reg. 70,427 (Nov. 22, 2002), JA____; EPA, *Source List of November 2002*, available at http://www.epa.gov/ttn/atw/area/area_source_list_112202.pdf, JA____.

⁴ EPA, *Mercury: Health Effects* (Mar. 10, 2014), <http://www.epa.gov/mercury/effects.htm#meth>, JA____.

⁵ See EPA, *Arsenic Compounds* (Oct. 18, 2013), <http://www.epa.gov/ttn/atw/hlthef/arsenic.html>, JA____; EPA, *Cadmium Compounds* (Oct. 18, 2013), <http://www.epa.gov/ttn/atw/hlthef/cadmium.htm>, JA____; EPA, *Manganese Compounds* (Oct. 18, 2013), <http://www.epa.gov/ttn/atw/hlthef/manganes.html>, JA____; EPA, *Selenium Compounds* (Oct. 18, 2013), <http://www.epa.gov/ttn/atw/hlthef/selenium.html>, JA____.

⁶ EPA, *Lead Compounds* (Oct. 18, 2013), <http://www.epa.gov/ttn/atw/hlthef/lead.html>, JA____.

immune system functions.⁷ Polychlorinated biphenyls cause damage to the immune system, neurodevelopmental damage to exposed infants, and other health problems.⁸

Several of the pollutants emitted by area-source boilers are known or suspected human carcinogens, including arsenic, cadmium, lead, polycyclic organic matter, and polychlorinated biphenyls. Arsenic causes several forms of cancer, and cadmium is a probable human carcinogen.⁹ Lead is a probable human carcinogen.¹⁰ Polycyclic organic matter and polychlorinated biphenyls are linked to increased risk of lung cancer, stomach cancer, liver tumors, and leukemia.¹¹ EPA estimates that area sources account for about 34 percent of the total cancer risk

⁷ *Id.*

⁸ EPA, *Polychlorinated Biphenyls (PCBs): Health Effects of PCBs* (Aug. 8, 2008), <http://www.epa.gov/epawaste/hazard/tsd/pcbs/pubs/effects.htm>, JA____.

⁹ See EPA, *Arsenic Compounds* (Oct. 18, 2013), <http://www.epa.gov/ttn/atw/hlthef/arsenic.html>, JA____.

¹⁰ EPA, *Lead Compounds* (Oct. 18, 2013), <http://www.epa.gov/ttn/atw/hlthef/lead.html>, JA____.

¹¹ EPA, *Polycyclic Organic Matter* (Oct. 18, 2013), <http://www.epa.gov/ttn/atw/hlthef/polycycl.html>, JA____; EPA, *Integrated Risk Information System: Polychlorinated biphenyls (PCBs) (CASRN 1336-36-3)* (Aug. 9, 2012), <http://www.epa.gov/iris/subst/0294.htm>, JA____.

from hazardous air pollution nationwide, more than double the risk from major sources (15 percent).¹²

Apart from their toxicity, mercury, polycyclic organic matter, and polychlorinated biphenyls are also “bioaccumulative” pollutants singled out by the Clean Air Act for especially strict regulation. 42 U.S.C. § 7412(c)(6); *Desert Citizens Against Pollution v. EPA*, 699 F.3d 524, 526 (D.C. Cir. 2012). Rather than break down in the environment, they accumulate in the food we eat, becoming increasingly concentrated as they progress up the food chain. S. Rep. No. 101-228, at 154-55 (1989), *reprinted in* 1990 U.S.C.C.A.N. 3385, 3539-40; *see also* 64 Fed. Reg. at 38,712/3, JA_____.

C. Control Technology.

Fortunately, commercially available control technologies are highly effective at reducing pollution from area-source boilers. Emissions of hazardous non-mercury metals are reduced 99 percent by fabric filters, 95 percent by electrostatic precipitators, and 10 percent by multiclones. EPA-HQ-OAR-2006-0790-2399 (“Emission Factors Memo”) at 35-36 tbls.B.2.C-D & app. C, JA_____ -

¹² EPA, *Second Integrated Urban Air Toxics Report to Congress* at 3-18 (Aug. 21, 2014), *available at* <http://www2.epa.gov/sites/production/files/2014-08/documents/082114-urban-air-toxics-report-congress.pdf>, JA_____.

____, ____-____. Fabric filters reduce mercury emissions also, by 75-82 percent. *Id.* at 35, tbl.B.2.C & app. C, JA____, ____-____.

According to EPA's air pollution reference manual, "fabric filtration has been widely applied to coal combustion sources since the early 1970s." EPA, Compilation of Air Pollutant Emission Factors, vol. I: Stationary Point and Area Sources (1995) ("AP-42") at 1.1-6, JA____. Today, both fabric filters and electrostatic precipitators are commonly used to control pollution at area-source boilers burning coal. PFPI Comments at 5, JA____; EPA-HQ-OAR-2006-0790-1982 ("Earthjustice Comments 2010") at 15-16, JA____-____. Fabric filters are already installed on 34 percent of area-source coal boilers. MACT/GACT Memo at app. D-3, JA____. An additional 21 percent have electrostatic precipitators. *Id.*

Biomass boilers typically use electrostatic precipitators, multiclones, or fabric filters. Electrostatic precipitators are already installed on 29 percent of area-source biomass boilers larger than 10 mmBTU/hr. *Id.* Multiclones are already installed on 36 percent of area-source biomass boilers smaller than 10 mmBTU/hr, and on 48 percent of area-source biomass boilers larger than 10 mmBTU/hr. *Id.* Of 44 area-source biomass boilers permitted between 2007 and 2011 and tracked in a recent study, every one uses an electrostatic precipitator or fabric filter. PFPI Comments at 2, 4, JA____, ____.

Despite the wide availability of these control technologies, many of the area-source boilers EPA surveyed for this rule employ no controls. MACT/GACT Memo at app. D-3, JA____-__ (showing that 21 percent of area-source coal boilers, 19 percent of area-source biomass boilers larger than 10 mmBTU/hr, and 64 percent of area-source biomass boilers smaller than 10 mmBTU/hr, have no control technology installed).

II. STATUTORY BACKGROUND.

As originally enacted, the Clean Air Act relied on EPA to identify which pollutants are “hazardous” and then determine appropriate health-based standards for them. *See Cement Kiln Recycling Coalition v. EPA*, 255 F.3d 855, 857-58 (D.C. Cir. 2001). That law “worked poorly.” *National Lime Ass’n v. EPA*, 233 F.3d 625, 634 (D.C. Cir. 2000). In the first eighteen years after enactment, the agency “regulated only some sources of only seven chemicals.” *Id.* (quoting S. Rep. No. 101-228, at 128, 1990 U.S.C.C.A.N. at 3513). To remedy this failure, Congress in 1990 entirely rewrote the section governing hazardous air pollutants—§ 7412. Congress itself identified an initial list of 189 hazardous air pollutants, 42 U.S.C. § 7412(b)(1), and then “prescribed a two-step process whereby EPA would regulate their emission.” *Desert Citizens*, 699 F.3d at 526. In the first step, EPA lists categories of sources that emit hazardous air pollutants; in the second, EPA issues technology-based emissions standards for the listed categories. *Id.*; 42

U.S.C. § 7412(c)-(d). EPA may delete a listed category, and thereby avoid the obligation to set standards, only by making findings prescribed by § 7412(c)(9).

New Jersey v. EPA, 517 F.3d 574, 578-79 (D.C. Cir. 2008).

Although the 1990 Amendments are most stringent in their treatment of major sources, Congress recognized that hazardous air pollutants emitted by area sources “present significant risks to public health.” 42 U.S.C. § 7412(k)(1). Congress set for EPA the goal of “achiev[ing] a substantial reduction in emissions of hazardous air pollutants from area sources and an equivalent reduction in the public health risks associated with such sources including a reduction of not less than 75 per centum in the incidence of cancer attributable to emissions from such sources.” *Id.* Congress directed EPA to develop a national urban air toxics strategy. *Id.* § 7412(k)(3)(A).

In addition, two provisions require EPA to list area sources for regulation. First, § 7412(c)(3) directs EPA to list categories of area sources “representing 90 percent of the area source emissions of the 30 hazardous air pollutants that present the greatest threat to public health in the largest number of urban areas.” 42 U.S.C. § 7412(c)(3). For the area sources listed under this provision, EPA has discretion to promulgate stringent “maximum achievable control technology” (“MACT”) standards under § 7412(d)(2) or alternative standards under (d)(5). 42 U.S.C. § 7412(d)(2), (d)(5); 64 Fed. Reg. at 38,724/1, JA____. Standards under (d)(5) are

based on “the use of generally available control technologies or management practices,” or “GACT.” 42 U.S.C. § 7412(d)(5); *Desert Citizens*, 699 F.3d at 527.

The second provision by which EPA lists area sources is § 7412(c)(6). That provision singles out seven bioaccumulative “pollutants of greatest concern,” S. Rep. No. 101-228, at 154-55, 1990 U.S.C.C.A.N. at 3539-40, including mercury, polycyclic organic matter, and polychlorinated biphenyls. 42 U.S.C. § 7412(c)(6). It directs EPA to “list categories and subcategories of sources assuring that sources accounting for not less than 90 per centum of the aggregate emissions of each such pollutant are subject to standards under subsection (d)(2) or (d)(4) of this section” and to promulgate “such standards” by November 15, 2000. *Id.* Thus EPA is required to promulgate stringent MACT standards under (d)(2), or health-based standards under (d)(4), for all sources listed under § 7412(c)(6), whether major or area. *Id.*; *Desert Citizens*, 699 F.3d at 527 (“[T]he usual criterion for selecting MACT versus GACT standards—whether a source is ‘major’ or ‘area’—is missing from the framework established by § [7412](c)(6).”).

MACT standards must require the “maximum” degree of reduction in emissions that is “achievable” considering cost and other factors. 42 U.S.C. § 7412(d)(2); *Sierra Club v. EPA*, 479 F.3d 875, 877 (D.C. Cir. 2007). EPA may set a “design, equipment, work practice, or operational” requirement in lieu of a numeric limit on emissions only if it is “not feasible to prescribe or enforce an

emission standard,” as defined in § 7412(h)(2). *Id.* § 7412(h)(1)-(2). Any design, equipment, work practice, or operational standard that EPA promulgates under § 7412(h) must be “consistent with the provisions of subsection (d) or (f) of [§ 7412].” *Id.* § 7412(h)(1).¹³

The 1990 Amendments also added, in the new Title V, a requirement that regulated sources obtain operating permits. Title V permits must “consolidate[] existing air pollution requirements into a single document,” *Sierra Club v. Leavitt*, 368 F.3d 1300, 1302 (11th Cir. 2004), and “set forth ... monitoring ... and reporting requirements to assure compliance with the permit terms and conditions.” 42 U.S.C. § 7661c(c). Congress’s intent in enacting Title V was to enable the public to “better determine the requirements to which the source is subject, and whether the source is meeting those requirements.” S. Rep. No. 101-228, at 347, 1990 U.S.C.C.A.N. at 3730. Congress predicted this would yield “[b]etter enforcement” of all air pollution requirements, “including . . . hazardous air pollution requirements.” *Id.*

The requirement to obtain a Title V permit applies to both major and area sources of hazardous air pollution. 42 U.S.C. § 7661a(a). EPA may exempt area-

¹³ § 7412(f), along with § 7412(d)(4), authorizes EPA to set standards for hazardous air pollutants at a level that protects human health with “an ample margin of safety.” 42 U.S.C. § 7412(f), (d)(4). EPA did not set any health-based standards in this rulemaking.

source categories, but only if “compliance with [Title V] is impracticable, infeasible, or unnecessarily burdensome on such categories.” *Id.* EPA may exempt an area-source category “in whole or in part.” *Id.*

III. REGULATORY BACKGROUND.

A. The Urban Air Toxics Strategy And Listing Decisions.

In 1999, EPA issued the urban air toxics strategy required by Congress. 64 Fed. Reg. 38,706, JA____. The strategy focuses on the Congressional goals of substantially reducing air toxics emissions from area sources and reducing cancer incidence by 75 percent. 64 Fed. Reg. at 38,712/2, JA____; *id.* at 38,708/2, JA____; 42 U.S.C. § 7412(k)(1). EPA states it will consider both MACT standards and GACT standards for each category of area sources, 64 Fed. Reg. at 38,723/2-24/1, JA____-____, and develop MACT standards “for those area sources whose emissions pose the greatest threat to human health and the environment and for which the technology to achieve maximum reductions in [hazardous air pollutant] emissions is appropriate.” *Id.* at 38,723/2, JA____

EPA listed area-source boilers for regulation pursuant to both § 7412(c)(3) and (c)(6). EPA listed area-source boilers under (c)(3) for their emissions of many of the 30 hazardous air pollutants found to present the greatest threat to public health in urban areas, including several potent carcinogens. National Emission Standards for Hazardous Air Pollutants: Revision of Area Source Category List

Under Section 112(c)(3) and 112(k)(3)(B)(ii) of the Clean Air Act, 67 Fed. Reg. 70,427, JA____. *See supra* at 4-6.

EPA also listed several subcategories of area-source boilers under § 7412(c)(6) for their emissions of two bioaccumulative “pollutants of greatest concern”—mercury and polycyclic organic matter. 63 Fed. Reg. 17,838, 17,849 tbl.2 (Apr. 10, 1998), JA____-____. Specifically, EPA listed “industrial coal combustion, industrial wood combustion, commercial coal combustion, commercial oil combustion, and commercial wood combustion,” as well as institutional combustion of the same fuels. *Id.*, 76 Fed. Reg. 15,556/1-2, JA____. Because EPA has never delisted any area-source boilers, “[t]he [Clean Air Act] [§ 7412](c)(6) list of source categories currently includes” all the area-source boilers subject to this rule. EPA-HQ-OAR-2006-0790-2514 (“Response to Comments 2012”) at 82, JA____ (denying that EPA has delisted any area-source boilers); 76 Fed. Reg. 15,556/1-2, JA____.

B. Standards For Area-Source Boilers.

Listing triggered EPA’s obligation to set standards for these sources by November 15, 2000, 42 U.S.C. § 7412(c)(3), (c)(6), but EPA did not issue standards until compelled to do so by an order of the U.S. District Court for the District of Columbia. *Sierra Club v. Jackson*, No. 01-1537, 2011 WL 181097, at *1, *14 (D.D.C. Jan. 20, 2011). Acting under court-ordered deadline, EPA issued

standards for area-source boilers on March 21, 2011, 76 Fed. Reg. 15,554, JA____, but began a process to reconsider them later that same year. 76 Fed. Reg. 80,532, JA____. On February 1, 2013, more than twelve years after the date by which Congress required these standards to be in place, EPA issued the final reconsidered area-source boilers rule challenged here. 78 Fed. Reg. 7488, JA____.

Although the § 7412(c)(6) list “currently includes” all area-source boilers burning coal, oil, and wood, 76 Fed. Reg. 15,556/1-2, JA____, EPA set MACT standards for emissions of mercury and polycyclic organic matter from coal boilers only. For the other categories listed under § 7412(c)(6)—oil and wood boilers—EPA claimed authority to set GACT standards under § 7412(d)(5) on the ground that it had “re-examined the emission inventory” and determined MACT standards were not needed. 76 Fed. Reg. at 15,556/2, JA____. Having determined it was not required to set MACT standards for emissions of mercury and polycyclic organic matter from oil and wood boilers, EPA did not consider setting MACT standards as a matter of discretion. Nor did EPA consider setting MACT standards for other pollutants, such as the non-mercury metals it has determined pose the greatest risk to public health in urban areas. 67 Fed. Reg. 70,427, JA____; 42 U.S.C. § 7412(k)(3)(B)(i). EPA did not assess whether MACT standards for these emissions are needed to attain the Congressional goal of reducing the cancer incidence attributable to area sources by 75 percent. *See* 42 U.S.C. § 7412(k)(1).

EPA determined that the MACT standard for control of mercury should reflect use of a fabric filter, EPA-HQ-OAR-2006-0790-2515 (“Beyond the Floor Memo”) at 2, JA____, but set “design, equipment, work practice, or operational” standards for certain coal boilers and certain periods of operation that do not require fabric filters. 76 Fed. Reg. at 15,560/1-3, JA____; 42 U.S.C. § 7412(d)(2)(D). For coal boilers smaller than 10 mmBTU/hr, EPA chose tune-ups as the standard. 76 Fed. Reg. at 15,560/1, JA____. For periods of startup and shutdown, EPA chose “following the [boiler] manufacturer’s recommended procedures” as the standard. *Id.* at 15,560/2-3, JA____. EPA estimates that the tune-up program will reduce emissions by only one percent, compared to reductions of 75-82 percent with a fabric filter.¹⁴ Impacts Methodology Memo at 17, JA____; 76 Fed. Reg. at 15,579/2-3 & tbl.3 n.b, JA____; Emission Factors Memo at 35-36 & app. C, JA____-____, ____-____. EPA does not claim that “following the [boiler] manufacturer’s recommended procedures” will reduce mercury emissions at all. EPA did not assess whether these operational standards are “consistent” with the requirements of § 7412(d) or (f). *Cf.* 42 U.S.C. § 7412(h)(1).

¹⁴ EPA subsequently weakened the tune-up program, eliminating the requirement for new boilers to conduct initial tune-ups and reducing the frequency of tune-ups for many boilers to once every five years. 76 Fed. Reg. at 80,536/3, JA____.

EPA also required certain existing area-source boilers to conduct a one-time “energy assessment.” Boiler operators must assess energy efficiency options but need not implement them. 78 Fed. Reg. at 7519 tbl.2, JA____. EPA admits that, if energy assessments yield any process improvement at all, the most likely improvement is just a tune-up. 75 Fed. Reg. at 31,907/2, JA____ (“The most common best practice [identified in an energy assessment] is simply tuning the boiler to the manufacturer’s specification.”).

For hazardous non-mercury metal emissions, EPA chose tune-ups as the GACT standard for existing sources, *Id.* at 31,908/1-2, JA____, even though EPA concedes that fabric filters, electrostatic precipitators, and multiclones are “generally available” and “commonly required by state and other federal regulations that apply to the area source boilers.” 76 Fed. Reg. at 15,566/3, JA____. EPA estimates the tune-up program will reduce these metals by one percent. *Id.* at 15,579/2-3 & tbl.3 n.b, JA____; Impacts Methodology Memo at 17, JA____. Fabric filters, electrostatic precipitators, and multiclones would reduce these metals by 99 percent, 95 percent, and 10 percent, respectively. Emission Factors Memo at 35-36 & app. C, JA____-__, ____-__; AP-42 at 1.1-6-7, JA____; 75 Fed. Reg. at 31,908/1, JA____.

EPA based its rejection of fabric filters in part on its “belie[f]” that fabric filters are “not . . . widely used.” 75 Fed. Reg. at 31,908/2, JA____. EPA gave no

reason for rejecting electrostatic precipitators. EPA rejected multiclones on the ground that a tune-up would “potentially” yield the same reduction in hazardous metals as a multiclone, *id.*, even though EPA estimates the reduction in hazardous metal emissions from multiclones to be 10 times greater than the reduction from tune-ups. *Compare* 76 Fed. Reg. at 15,579/2-3 & tbl.3 n.b, JA____, *with* 75 Fed. Reg. at 31,908/1, JA____.

EPA did select fabric filters and electrostatic precipitators as GACT for new area-source boilers. 76 Fed. Reg. at 15,566/3, JA____. But EPA set the standard for certain new area-source coal boilers based on the emissions of an uncontrolled unit. MACT/GACT Memo at 15, JA____ (standard for new coal boilers between 10 and 30 mmBTU/hr) (“there were no [coal] units which used control devices, so the lowest [particulate matter] value from the available data was selected”). The resulting standard (0.42 lb/mmBTU) is fourteen times higher than the standard based on use of a fabric filter (0.03 lb/mmBTU). *Id.* at 16 tbl.3, JA____; 78 Fed. Reg. 7517-8 tbl.1, JA____-__.

C. Exemption For Temporary Boilers.

EPA created a class of boilers called “temporary boilers”—defined as “any gaseous or liquid fuel boiler that is designed to, and is capable of, being carried or moved”—and exempted them from the standards. 78 Fed. Reg. at 7491/3, JA____. In response to comments pointing out that the Clean Air Act requires EPA to

regulate all listed boilers, EPA claimed that temporary boilers are not listed.

Response to Comments 2012 at 65 (“EPA is simply clarifying the scope of the listed source category to make it clearer that those types of boilers the agency had never intended to include in the category in fact have not been included.”).

D. Effect Of EPA’s Regulatory Decisions.

Taken together, EPA’s regulatory decisions ensure that far less than one percent of the area-source boilers listed for regulation under § 7412(c)(3) and (c)(6) will have to comply with a numeric emissions limit at any time. EPA, Fact Sheet: Adjustments for Major and Area Source Boilers and Certain Incinerators (2012) (“Fact Sheet”) at 2, JA____, *available at* http://www.epa.gov/airquality/combustion/docs/20121221_sum_overview_boiler_ciswi_fs.pdf (“Less than 1% [of listed area-source boilers] (about 600) would need to meet emission limits to minimize toxics.”); EPA-HQ-OAR-2006-0790-2335 (“Regulatory Impact Analysis”) at 5-15, JA____, (“[O]nly about 0.3 percent of the area source facilities are subject to emission limits and the testing and monitoring requirements in the final rule.”). Of those area-source boilers that are subject to any standard at all, the vast majority need only implement a tune-up program or conduct an energy assessment. Fact Sheet at 2, JA____. EPA estimates that the tune-up program will reduce emissions by one percent. *Supra* at 16, 17.

EPA estimates that total hazardous pollution from area-source boilers will remain virtually unchanged:

Pollutant	Emissions (existing sources) (tons per year)		Emissions (new sources) (tons per year)	
	Before rule	After rule	Before rule	After rule
Particulate matter (surrogate for hazardous metals)	130,077	127,821	6,254	5,978
Carbon monoxide (surrogate for hazardous organics)	99,376	98,387	8,083	8,002
Hazardous metals	28,059	27,775	3,039	3,001
Mercury	4	4	0	0

EPA, Impacts Methodology Memo at 2-3 & app. B, JA____-__, ____-__.

E. Exemption From Title V Reporting.

EPA proposed to exempt most area-source boilers from Title V of the Clean Air Act, 75 Fed. Reg. at 31,910/3-11/1, JA____-__, including the requirement to obtain an operating permit, the associated public process, and the requirement to report the results of emissions monitoring. 42 U.S.C. § 7661c(c). EPA proposed to leave Title V intact for certain “synthetic” area-source boilers—boilers which have the potential to emit major amounts of hazardous air pollutants but commit to

reduce their annual emissions below the major-source threshold using control technology. 75 Fed. Reg. at 31,910/3-11/1, JA____-__.

EPA weighed several considerations to determine whether compliance with Title V would be “unnecessarily burdensome” for the large majority of area-source boilers that would be area sources even without controls. 42 U.S.C. § 7661a(a). EPA stated that these area-source boilers are mostly “small entities” with limited resources. 75 Fed. Reg. at 31,912/1, JA____. EPA also stated that their large numbers could overwhelm state and federal authorities. *Id.* EPA claimed the gain in compliance if Title V were required would be “minimal or non-existent.” EPA-HQ-OAR-2006-0790-2330 (“Response to Comments 2011”) vol. 2 at 19, JA____; 75 Fed. Reg. at 31,911/3, JA____. Balancing the “high relative costs” against “little to no potential gain in compliance,” EPA concluded that Title V is unnecessarily burdensome for boilers that would be area sources even without controls. 75 Fed. Reg. at 31,912/3, JA____.

For boilers that are synthetic area sources due to controls, by contrast, EPA determined that many are “large facilities with comprehensive compliance programs in place,” “much more like the major sources of [hazardous air pollution].” *Id.* at 31,913/1-2, JA____. EPA noted that these controlled synthetic area sources are very few in number, “represent[ing] less than one percent” of area-source boilers. *Id.* at 31,913/1, JA____; *see also id.* at 31,911/1, JA____

(estimating that 48 area-source boilers “reduced their [] emissions to below the major source thresholds by installing air pollution control devices”). EPA acknowledged that “many of these sources are located in cities, and often in close proximity to residential and commercial centers where large numbers of people live and work.” *Id.* at 31,913/1, JA____. EPA determined that the “public involvement and compliance assurance requirements” of Title V are “important” for these sources, particularly “to ensure [they] are maintaining their emissions at the area source level.” *Id.* at 31,913/2, JA____. EPA concluded that the “additional public participation and compliance benefits provided by [T]itle V permitting” are “need[ed]” for controlled synthetic area-source boilers, Response to Comments 2011 vol. 2 at 17, JA____, and declined to exempt them from Title V. 75 Fed. Reg. at 31,913/2, JA____.

In the final rule, however, EPA reversed its position, stating that it lacked sufficient information to reliably distinguish controlled synthetic area sources from other area-source boilers. 76 Fed. Reg. at 15,578/2, JA____. “As a result,” EPA claimed, “the rationale . . . explained in the proposal preamble” for most area-source boilers “is also now relevant” for controlled synthetic area-source boilers. *Id.* On that basis, EPA exempted all area-source boilers from Title V. *Id.*

SUMMARY OF ARGUMENT

EPA's standards for area-source boilers are unlawful and arbitrary in several respects.

Standards for oil and wood boilers. EPA violated the statutory requirement to set “standards under subsection (d)(2) or (d)(4)” for sources listed under § 7412(c)(6), 42 U.S.C. § 7412(c)(6), by setting standards under § 7412(d)(5) for listed area-source oil and wood boilers, and no standards at all for area-source oil boilers that are “temporary.” EPA's claim that, just by “re-examining” its listing decision, the agency may decline to set “standards under subsection (d)(2) or (d)(4)” for boilers that it listed under § 7412(c)(6) is contrary to the plain language of the statute and this Court's decision in *New Jersey*, 517 F.3d 574.

Standards for carcinogenic metals and other dangerous urban pollutants. The only reason EPA gave for not setting “maximum achievable control technology” standards for these pollutants is that those standards are not statutorily required. EPA failed to even consider setting MACT standards as a matter of discretion and failed to assess whether MACT standards are needed to achieve the Congressionally defined goals of substantially reducing this pollution and reducing associated cancer risk by 75 percent. For these reasons, EPA's

decision to set weaker standards that will only reduce this pollution by one percent was arbitrary.

Tune-ups for coal boilers. Although EPA concedes that MACT standards are required for all area-source coal boilers, EPA set an operational standard of a tune-up for small coal boilers and an operational standard of “following the [manufacturer’s] recommended procedures” for periods of startup and shutdown. These standards are unlawful because they do not purport to satisfy the requirement of § 7412(h)(1) that operational standards be “consistent with the provisions of subsection (d) or (f)” of § 7412, 42 U.S.C. § 7412(h)(1), which require the maximum achievable reduction in emissions or protection of health with an ample margin of safety. 42 U.S.C. § 7412(d)(2), (f). The operational standards are also unreasonable and arbitrary because EPA did not explain how its approach conforms to this statutory requirement.

Title V exemption for synthetic area sources. EPA arbitrarily concluded that Title V is “unnecessarily burdensome” for the small number of boilers that reduced their emissions below the major-source threshold by installing controls. EPA arbitrarily determined that the burden of Title V is the same for these controlled synthetic area sources as for the area-source boilers EPA initially proposed to exempt, even though EPA admits that the other area-source boilers are far more numerous, and the record is clear that the other area-source boilers are

overwhelmingly small units at small entities like churches and schools. EPA also arbitrarily determined that the benefits of compliance with Title V are “minimal or non-existent” for the controlled synthetic area sources, without explaining how this conclusion is consistent with its view that the additional compliance benefits of citizen enforcement are “important” and “need[ed]” for these sources.

STANDARD OF REVIEW

This Court reviews EPA’s construction of the Clean Air Act pursuant to *Chevron USA Inc. v. Natural Res. Def. Council*, 467 U.S. 837 (1984). Under *Chevron* step one, the question is whether “the intent of Congress is clear.” 467 U.S. at 842-43. If so, “that is the end of the matter; for the court, as well as the agency, must give effect to the unambiguously expressed intent of Congress.” *Id.* Under *Chevron* step two, EPA’s interpretation of ambiguous statutory provisions must be rejected if, among other things, “the agency has [not] offered a reasoned explanation for why it chose that interpretation,” *Vill. of Barrington, Ill. v. Surface Transp. Bd.*, 636 F.3d 650, 660 (D.C. Cir. 2011), or the interpretation “frustrate[s] the policy that Congress sought to implement,” *Shays v. FEC*, 528 F.3d 914, 925 (D.C. Cir. 2008) (internal quotation marks and citation omitted).

EPA’s action is arbitrary and capricious if the agency “entirely failed to consider an important aspect of the problem,” *Motor Vehicle Mfrs. Ass’n v. State Farm Mut. Auto. Ins. Co.*, 463 U.S. 29, 43 (1983), or failed to “identif[y] and

explain[] the reasoned basis for its decision,” *Transactive Corp. v. United States*, 91 F.3d 232, 236 (D.C. Cir. 1996). In particular, an agency’s action is arbitrary if the agency has not considered statutory requirements, *Massachusetts v. EPA*, 549 U.S. 497, 532-34 (2007), or has not explained how its action comports with those requirements, *Mountain Commc’ns, Inc. v. FCC*, 355 F.3d 644, 648-49 (D.C. Cir. 2004).

STANDING

Environmental Petitioners have standing to bring this suit on behalf of their members. *See Friends of the Earth v. Laidlaw Env’tl. Servs. (TOC)*, 528 U.S. 167, 181 (2000). Environmental Petitioners’ members live, work, and recreate near area-source boilers regulated by the rule. They are exposed to toxic air emissions from area-source boilers, and suffer other harm including a diminished ability to engage in and enjoy recreational and aesthetic interests. *See* Declarations. Because the rule does not reduce these emissions as required by the Clean Air Act, it prolongs and increases this harm. The Court may redress these injuries by ordering EPA to follow the Clean Air Act on remand. *See, e.g., Natural Res. Def. Council v. EPA*, 749 F.3d 1055, 1062 (D.C. Cir. 2014); *Ass’n of Battery Recyclers v. EPA*, 716 F.3d 667, 672-73 (D.C. Cir. 2013); *Sierra Club v. EPA*, 699 F.3d 530, 533 (D.C. Cir. 2012).

Environmental Petitioners are also injured by EPA's decision to exempt area-source boilers from Title V. The exemption deprives Petitioners and their members of information about hazardous pollution emitted by sources they live, work, and recreate near. *See* Declaration of Dave Hemberger ¶ 12; Declaration of Barbara Richert ¶ 11; *infra* at 44, 45-46. The denial of "information which must be publicly disclosed pursuant to a statute" is injury-in-fact. *FEC v. Akins*, 524 U.S. 11, 21 (1998). *See Shays*, 528 F.3d at 923; *Ethyl Corp. v. EPA*, 306 F.3d 1144, 1148 (D.C. Cir. 2002). The exemption also injures Environmental Petitioners procedurally by depriving them of the opportunity to participate in the public process that accompanies the permitting of sources under Title V. *See* Declarations; *Shays v. FEC*, 414 F.3d 76, 91-92 (D.C. Cir. 2005).

ARGUMENT

I. EPA'S FAILURE TO SET STANDARDS UNDER § 7412(D)(2) OR (D)(4) FOR LISTED AREA-SOURCE BOILERS IS UNLAWFUL AND ARBITRARY.

A. EPA's Failure To Set Standards Under § 7412(d)(2) Or (d)(4) For Boilers Listed For Regulation Under § 7412(c)(6) Violates § 7412(c)(6).

EPA concedes that oil and biomass area-source boilers are currently listed for regulation under § 7412(c)(6), 42 U.S.C. § 7412(c)(6), for their emissions of bioaccumulative mercury and polycyclic organic matter. 76 Fed. Reg. at 15,556/1-2, JA____. That provision directs EPA to set "standards under subsection (d)(2) or

(d)(4).” 42 U.S.C. § 7412(c)(6). EPA’s decision to regulate these emissions under (d)(5) instead, resulting in just a tune-up program, is therefore unlawful at *Chevron* step one.

EPA claims authority to regulate these listed sources under (d)(5) based on a “re-examin[ation] of the emission inventory” that allegedly demonstrates they are not needed to reach 90 percent. 76 Fed. Reg. at 15,556/2, JA____. But the plain language of § 7412(c)(6) requires “standards under subsection (d)(2) or (d)(4).” 42 U.S.C. § 7412(c)(6). If EPA wishes to avoid setting “standards under subsection (d)(2) or (d)(4)” for a listed source category, it must delist that category according to the procedures contained in § 7412(c)(9). *New Jersey*, 517 F.3d at 578-79.

In response to comments, EPA claims the statute’s reference to “90 per centum of the aggregate emissions of each [bioaccumulative] pollutant” confers authority to set standards under (d)(5) for sources the agency lists and later determines are not needed to reach 90 percent. Response to Comments 2012 at 82, JA____. That is wrong. The statutory language on which EPA relies unambiguously governs EPA’s listing decisions:

[T]he Administrator shall, not later than 5 years after November 15, 1990, list categories and subcategories of sources assuring that sources accounting for not less than 90 per centum of the aggregate emissions of each [bioaccumulative] pollutant are subject to standards under subsection (d)(2) or (d)(4) of this section. Such standards shall be promulgated not later than 10 years after November 15, 1990.

42 U.S.C. § 7412(c)(6) (emphasis added). Under the plain language of the provision, it is the listing decision that must “assur[e]” that 90 percent of the emissions of these pollutants will be regulated, not a subsequent re-examination of the emission inventory at the standard-setting stage. EPA’s post-listing re-examination of the inventory can establish, at most, that the listing of certain categories went beyond the listing provision’s minimum requirements. It does not alter EPA’s obligation to promulgate “standards under subsection (d)(2) or (d)(4)” for the listed categories.

EPA’s claim of authority to avoid setting these standards is also an end-run around § 7412(c)(9) and this Court’s holding in *New Jersey*. Congress provided a procedure in § 7412(c)(9) by which EPA can decide not to regulate listed sources. 42 U.S.C. § 7412(c)(9). *New Jersey* holds that EPA may not circumvent that procedure just by claiming its original listing decision was in error, because to do so would “nullify” that provision. 517 F.3d at 583. EPA’s maneuver here—refusing to set the standards required for listed sources based on new claims about the listing inventory—is a delisting in all but name, and has the same effect of nullifying § 7412(c)(9).

B. EPA's Failure To Set Any Standards For "Temporary Boilers" Violates § 7412(c)(6) And (c)(2).

EPA seeks to justify its failure to set any standards for "temporary boilers" on a different ground. The agency's regulatory obligations with respect to those units, EPA says, depend not on the recent re-examination of the emissions inventory, but on what EPA "intended to include" in the source category at the time of listing. Response to Comments 2012 at 65, JA____. This too is wrong. What EPA subjectively "intended" to list is not relevant to EPA's standard-setting obligation. The plain language of § 7412(c) and (d) require EPA to set standards for the categories and subcategories it actually listed. 42 U.S.C. § 7412(c)(6); *id.* § 7412(c)(2) ("For the categories and subcategories the Administrator lists, the Administrator shall establish emissions standards[.]"); *id.* § 7412(d)(1).

EPA in fact listed industrial, commercial, and institutional coal, oil, and wood combustion at area sources, 76 Fed. Reg. 15,556/1-2, JA____, without regard to whether the combustion unit is "temporary." Thus EPA must now issue standards for all of these categories, or delist them pursuant to § 7412(c)(9). 42 U.S.C. § 7412(c)(9); *New Jersey*, 517 F.3d at 578-79. EPA's refusal to set standards for listed boilers on the ground that they are "temporary" violates § 7412(c)(6) and (c)(2). 42 U.S.C. § 7412(c)(6) & (c)(2).

C. EPA's Failure To Set § 7412(d)(2) MACT Standards For Emissions Of Carcinogenic Metals And Other Particularly Harmful Hazardous Pollutants Is Arbitrary.

EPA arbitrarily decided not to set MACT standards for emissions of carcinogenic metals and other hazardous pollutants identified under § 7412(k)(3)(B)(i) as posing the greatest threat to human health in urban areas. 42 U.S.C. § 7412(k)(3)(B)(i). The Act gives EPA discretion to set MACT or GACT standards for these emissions. 42 U.S.C. § 7412(d)(5) (“[T]he Administrator *may*, in lieu of the authorities provided in [(d)(2)] ..., elect to promulgate [GACT standards].”) (emphasis added). EPA must exercise this discretion in a reasoned, non-arbitrary manner and explain the basis for its decision. *See State Farm*, 463 U.S. at 43; *Transactive Corp.*, 91 F.3d at 236.

EPA failed to consider requiring the maximum achievable reduction in this dangerous pollution. The only reason EPA gave for not setting MACT standards is that the Act does not require them. 75 Fed. Reg. at 31,904/3-05/1, JA____-____. Even after commenters pointed out EPA's discretion to set MACT standards and obligation to rationally exercise this discretion, Earthjustice Comments 2010 at 16, JA____, EPA still proceeded as if it lacked this discretionary authority. *See* 76 Fed. Reg. at 15,556-57, 15,558/3, 15,574/2, JA____-____, _____. EPA gave zero consideration to whether a MACT standard for the carcinogenic pollutants is needed to achieve Congress's express goals of reducing area-source emissions

“substantially” and reducing the incidence of cancer attributable to area sources by “not less than 75 per centum.” 42 U.S.C. § 7412(k)(1). EPA likewise gave zero consideration to its own pledge in the urban air toxics strategy to consider MACT standards for emissions from area sources that pose the greatest threat to human health. *Supra* at 13. And EPA completely failed to grapple with its previous conclusion that area-source boilers are responsible for a large percentage of the emissions of several of these very dangerous pollutants. *Supra* at 4-5.

By failing even to consider exercising its discretionary authority to require the maximum achievable reduction in these emissions, EPA “entirely failed to consider an important aspect of the problem.” *State Farm*, 463 U.S. at 43. EPA also failed to “identif[y] and explain[] the reasoned basis for its decision” not to set MACT standards as a matter of discretion. *Transactive Corp.*, 91 F.3d at 236; *see also State Farm*, 463 U.S. at 48 (“an agency must cogently explain why it has exercised its discretion in a given manner”). For both of these reasons, EPA’s decision not to set MACT standards for carcinogenic metals and other especially harmful hazardous pollutants is arbitrary.

II. EPA VIOLATED § 7412(H) AND ACTED ARBITRARILY BY SETTING OPERATIONAL STANDARDS THAT ARE NOT CONSISTENT WITH THE REQUIREMENTS OF § 7412(D) OR (F).

For EPA’s operational standards to be legal, they must be “consistent with the provisions of subsection (d) or (f)” of § 7412. 42 U.S.C. § 7412(h)(1).

Subsection 7412(d) provides that MACT standards must require the “maximum” degree of reduction in emissions that is “achievable” considering cost and other factors. *Id.* § 7412(d)(2); *id.* § 7412(d)(2)(D) (listing design, equipment, work practice, and operational standards among the standards that must require the maximum achievable reduction). Subsection 7412(f) authorizes “standard[s] to protect health and environment,” which “shall provide an ample margin of safety.” *Id.* § 7412(f)(2)(A).

EPA does not claim the operational standards are “consistent with the provisions of subsection (d) or (f)” of § 7412. *Id.* § 7412(h)(1). Because the operational standards do not even purport to satisfy this statutory requirement, they are unlawful under *Chevron* step one. *Chevron*, 467 U.S. at 842-43 (“the court, as well as the agency, must give effect to the unambiguously expressed intent of Congress.”). Significantly, EPA found that the maximum achievable reduction in emissions of mercury corresponds to reductions of 75-82 percent using a fabric filter. *Supra* at 16. Yet EPA admits the tune-up program will reduce emissions by only one percent, and EPA does not claim that “following the manufacturer’s recommended procedures” during startup and shutdown will reduce emissions at all. *Id.* EPA’s failure to heed § 7412(h)(1)’s consistency mandate is no abstract concern.

EPA's work practice standards are also unreasonable under *Chevron* step two and arbitrary because EPA has not even attempted to reconcile its approach with the statutory requirement. *See Vill. of Barrington*, 636 F.3d at 660 (court defers to agency interpretation under *Chevron* "only if the agency has offered a reasoned explanation for why it chose that interpretation"); *Mountain Commc'ns*, 355 F.3d at 648-49 (holding action arbitrary where "[t]he Commission [] has not even tried to explain how its position can be reconciled with the statutory provision"). Although commenters pointed out that tune-ups are not "consistent" with the MACT provisions of § 7412(d), EPA-HQ-OAR-2006-0790-2022 ("NACAA Comments 2010") at 22, JA____, EPA failed to respond. *See Response to Comments 2011 vol. 1* at 397, JA____. In the final rule preamble, 76 Fed. Reg. at 15,568/2-3, JA____, EPA proceeds as if its only statutory obligation is to show that setting numerical emissions standards is "not feasible" under § 7412(h)(2)—a completely different requirement. *See* 42 U.S.C. § 7412(h)(1)-(2). EPA's finding that numeric standards are not feasible says nothing about whether the non-numeric operational standards are consistent with the MACT provisions of subsection (d) or the health-protective provisions of (f). Thus EPA's reasoning is impermissibly "divorced from the statutory text." *Massachusetts*, 549 U.S. at 532-35. Further, because it does not even attempt to conform to the statute's plain text,

it deprives the plain text “of virtually all effect.” *Halverson v. Slater*, 129 F.3d 180, 189 (D.C. Cir. 1997).

III. EPA VIOLATED § 7412(D)(5) AND ACTED ARBITRARILY BY SETTING GACT STANDARDS THAT DO NOT PROVIDE FOR THE USE OF GENERALLY AVAILABLE CONTROL TECHNOLOGIES.

A. The GACT Standards Are Unlawful Because They Do Not Provide For The Use Of Generally Available Control Technologies.

EPA’s GACT standards for emissions of hazardous metals are unlawful at *Chevron* step one because they do not “provide for the use of” highly effective control technologies EPA concedes are “generally available.” 42 U.S.C.

§ 7412(d)(5) (definition of GACT); 76 Fed. Reg. at 15,566/3, JA____ (control technologies are “generally available” and “commonly required”).

First, one of the standards for coal boilers was set to reflect the emissions of a coal boiler without any controls, yielding a standard fourteen times higher than the standard for the next size category. *Supra* at 18. Where controls are generally available, as they undisputedly are here, a standard based on a boiler with no controls does not “provide for the use of generally available control technologies.” 42 U.S.C. § 7412(d)(5). Basing this standard on an uncontrolled boiler “substitut[es] EPA’s desires for the plain text” of the statute. *New Jersey*, 517 F.3d at 582.

The GACT standards that consist of a tune-up program are unlawful for the same reason—they do not provide for the use of control technologies EPA concedes are “generally available.” EPA rejected fabric filters as GACT partly on the basis that they are “not ... widely used.” 75 Fed. Reg. at 31,908/2, JA____. Refusing to require a “generally available” control technology unless it is also “widely used” is contrary to the Congressional command to base these standards on the technology that is “generally available.” 42 U.S.C. § 7412(d)(5) (emphasis added). If Congress had intended § 7412(d)(5) to require only the use of technology that is already in wide use, Congress would not have defined GACT based on what is “available.” *See Landstar Express America, Inc. v. FMC*, 569 F.3d 493, 500 (D.C. Cir. 2009) (“the agency cannot rewrite a statute”); *Leocal v. Ashcroft*, 543 U.S. 1, 12 (2004) (“we must give effect to every word of a statute wherever possible”).

B. The GACT Standards Are Unreasonable And Arbitrary.

EPA’s interpretation of § 7412(d)(5) is also unreasonable at *Chevron* step two. The goal of regulation of area sources under § 7412, as defined by Congress, is to reduce area-source emissions “substantially” and reduce the incidence of cancer attributable to area sources by “not less than 75 per centum.” 42 U.S.C. § 7412(k)(1). Further, in § 7412(d)(5) Congress instructed EPA to choose GACT standards that “reduce emissions of hazardous air pollutants.” 42 U.S.C.

§ 7412(d)(5). Interpreting § 7412(d)(5) to allow GACT standards that achieve only negligible (one percent) reductions, when concededly “generally available” control technologies yield reductions of 99 or 95 percent, *supra* at 17, is unreasonable because it “frustrate[s] the policy that Congress sought to implement.” *Shays*, 528 F.3d at 925. Further, EPA’s interpretation is unreasonable because the agency has not explained how such minimal standards satisfy the statute. *Se. Ala. Med. Ctr. v. Sebelius*, 572 F.3d 912, 920 (D.C. Cir. 2009) (agency must explain how its approach “comports with the governing statute”).

EPA’s rejection of generally available control technologies as GACT is also arbitrary. Commenters urged EPA to set standards based on electrostatic precipitators, Earthjustice Comments 2010 at 16, JA____, but in response EPA gave no reason for rejecting them. *See* Response to Comments 2011 vol. 2 at 392, JA____. EPA concedes that electrostatic precipitators are highly effective at reducing pollution, “generally available,” and “commonly required.” *Supra* at 17. The agency’s failure to provide “any reasons” for rejecting electrostatic precipitators and “failure to respond to contrary arguments” “epitomizes arbitrary and capricious decisionmaking.” *Ill. Pub. Telecomm. Ass’n v. FCC*, 123 F.3d 693, 694 (D.C. Cir. 1997). *See Transactive Corp.*, 91 F.3d at 236 (action arbitrary where agency failed to “identif[y] and explain[] the reasoned basis for its decision”).

EPA's rejection of multiclones is arbitrary as well. The record reveals that "GACT for existing units was determined to be a multiclone." MACT/GACT Memo at 14, JA____. Yet EPA instead set a tune-up program as the GACT standard based on its claim that tune-ups would "potentially" yield the same reduction in hazardous metals as multiclones. 75 Fed. Reg. at 31,908/2, JA____. This reasoning conflicts with the agency's own conclusion that the reduction in hazardous metal emissions from multiclones would be 10 times greater than the reduction from a tune-up program. *Id.* at 31,908/1, JA____ (10 percent reduction from multiclones); 76 Fed. Reg. at 15,579/2-3 & tbl.3 n.b, JA____; Impacts Methodology Memo at 17, JA____ (one percent reduction from tune-up program). EPA's reasoning "is internally inconsistent and therefore arbitrary." *Bus. Roundtable v. SEC*, 647 F.3d 1144, 1153 (D.C. Cir. 2011). *See also Shays*, 528 F.3d at 927 (rejecting agency conclusion refuted by the record).

IV. EPA ARBITRARILY CONCLUDED THAT TITLE V IS UNNECESSARILY BURDENSOME FOR CONTROLLED SYNTHETIC AREA-SOURCE BOILERS.

EPA proposed to require Title V operating permits for boilers that promise to reduce their emissions below the major-source threshold using controls, but then in the final rule determined that Title V is "unnecessarily burdensome" for those sources. *Supra* at 20-22; 42 U.S.C. § 7661a(a). Two aspects of EPA's final-rule determination are arbitrary. First, EPA arbitrarily concluded the "burden" of Title

V on these controlled synthetic area sources is the same as for the area-source boilers EPA initially proposed to exempt. Second, EPA arbitrarily determined this burden is “unnecessary” by ignoring the benefits of citizen enforcement.

A. EPA Arbitrarily Concluded That The Burden Of Title V Is The Same For The Controlled Synthetic Area-Source Boilers And Other Area-Source Boilers.

In proposing to exempt all area-source boilers except controlled synthetic area sources, EPA noted that the area-source boilers it proposed to exempt are very numerous and mostly small in size, while the controlled synthetic area sources are few in number and “much more like the major sources.” *Supra* at 21. In the final rule EPA stated it “lack[ed] sufficient information” to reliably distinguish between these classes of area-source boilers. 76 Fed. Reg. at 15,578/2, JA____. On that basis alone, EPA claimed that “the rationale for exempting” most area sources “is also now relevant for” the controlled synthetic area sources, and exempted the controlled synthetic area sources too. *Id.*

EPA offers no explanation of why it would be difficult to obtain any additional information it needs on synthetic area-source boilers. To qualify for area-source status, synthetic area sources must notify EPA or the state permitting authority of the limit on their emissions. EPA, Guidance [on] Enforceability Requirements for Limiting Potential to Emit through SIP and §112 Rules and General Permits (Jan. 25, 1995) at 6, JA ____ (“where coverage is optional, [state

programs must] provide for notice to the permitting authority of the source's election to be covered"). To determine which sources are synthetic area-sources due to controls, therefore, EPA need only ask these authorities to identify the sources operating in their states. "The agency has offered no good reason for treating this problem with such passivity." *Pub. Citizen v. FMCSA*, 374 F.3d 1209, 1222 (D.C. Cir. 2004).

Quite apart from why EPA lacks this information, EPA's claim that it lacks information on controlled synthetic area sources says nothing about whether compliance with Title V is "unnecessarily burdensome" for those sources. At proposal, EPA's "unnecessarily burdensome" finding did not encompass controlled synthetic area sources. EPA cannot extend its former rationale to the controlled synthetic area sources without "adding new evidence [or] explaining why the old evidence support[s] the new conclusion." *Allegheny Power v. FERC*, 437 F.3d 1215, 1224 (D.C. Cir. 2006). *See Intercollegiate Broadcast Sys. v. Copyright Royalty Bd.*, 574 F.3d 748, 767 (D.C. Cir. 2009) ("Rational decisionmaking . . . requires more than an absence of contrary evidence; it requires substantial evidence to support a decision."). Because a lack of evidence is not substantial evidence, EPA's extension of the "unnecessarily burdensome" finding to the controlled synthetic area sources is arbitrary, and so is the Title V exemption

for those sources. *Allegheny Power*, 437 F.3d at 1224; *Intercollegiate Broadcast Sys.*, 574 F.3d at 767.

Moreover, EPA's claim that the rationale for most area-source boilers applies to the controlled synthetic area sources is contradicted by EPA's admission that controlled synthetic area sources are few in number compared to the area sources EPA initially proposed to exempt. EPA reaffirms this is so on reconsideration, 76 Fed. Reg. at 80,538/3, JA____, (all synthetic area sources are "less than 1 percent" of covered boilers), even while repeating the contradictory conclusion that the rationale for most area sources applies to the controlled synthetic area sources. *Id.* at 80,538/2-3, JA____. EPA's self-contradictory reasoning is irrational and arbitrary. *See Siegel v. SEC*, 592 F.3d 147, 161 (D.C. Cir. 2010) (agency decision "must be logical and rational"); *Rio Grande Pipeline Co. v. FERC*, 178 F.3d 533, 543 (D.C. Cir. 1999) (vacating agency orders that "defy good reason").

EPA's conclusion with regard to controlled synthetic area sources is likewise undercut by EPA's prior admission that they are "much more like the major sources" than like the boilers EPA originally proposed to exempt. *Supra* at 21. On this point, EPA does fully reverse itself in the reconsideration rule preamble, claiming for the first time that the controlled synthetic area sources are "similar in size and sophistication" to the other area-source boilers. 76 Fed. Reg.

at 80,538/3, JA____. But this claim is contradicted by the record and EPA's own statements. Most major-source boilers are industrial facilities, like refineries, chemical plants, and factories,¹⁵ and the controlled synthetic area sources are, by definition, major sources that "install[] air pollution control devices." 75 Fed. Reg. 31,911/1, JA____. The record shows that many are "large, standalone electricity-producing plants," some with capacity over 800 mmBTU/hr, PFPI Comments at 3, JA____, and that they "overlap considerably in size with . . . major sources." *Id.*

This is in stark contrast with the other area-source boilers, most of which are tiny in comparison. EPA estimates that 169,403 of 182,671 area-source boilers are smaller than 10 mmBTU/hr. EPA-HQ-OAR-2006-0790-2334 at 9, JA____. Ninety-seven percent of area-source boilers are located at "small entities" like service establishments, not-for-profits, and local and tribal government offices. *Id.* 68,103 area-source boilers are located at schools, 34,412 at doctor's offices and hospitals, and 9,947 at hotels. Impacts Methodology Memo at app. A-1, JA____. For purposes of modeling impacts, EPA identified churches, hospitals, and schools as "model facilities" covered by the area source rule. Regulatory Impact Analysis at 5-5, JA____.

¹⁵ EPA, *Small Entity Compliance Guide for Major Source Boilers* (2013) at 1, JA____, available at <http://www.epa.gov/ttn/atw/boiler/imptools/20130312complianceguide.pdf>.

EPA never explains how the conclusory assertion that controlled synthetic area sources are “similar in size and sophistication” to the other area-source boilers can be reconciled with record evidence showing that the vast majority of area-source boilers are very small units at small entities like churches and schools, while many of the controlled synthetic area sources are large industrial facilities. *United Techs. Corp. v. DOD*, 601 F.3d 557, 562-63 (D.C. Cir. 2010) (“We do not defer to the agency’s conclusory or unsupported suppositions.”). EPA’s conclusion is arbitrary because “the only evidence in the record available to this Court actually supports the *opposite* conclusion[.]” *Clark Cnty. v. FAA*, 522 F.3d 437, 441-42 (D.C. Cir. 2008). EPA’s conclusion is also arbitrary because EPA failed to “address contrary evidence in more than a cursory fashion.” *Transmission Agency of N. Cal. v. FERC*, 628 F.3d 538, 543-44 (D.C. Cir. 2010).

B. EPA Arbitrarily Dismissed The Compliance Benefits Of Title V.

To reach the ultimate conclusion that the burden on controlled synthetic area-source boilers is “unnecessary,” 42 U.S.C. § 7661a(a), EPA pronounced the benefits of Title V “minimal or non-existent.” *Supra* at 21-22. In doing so EPA ignored its own previous conclusions that the additional compliance benefits of Title V are “need[ed]” for controlled synthetic area sources and “important.” *Supra* at 22.

Commenters pointed out that “Congress intended ordinary citizens to be able to get emissions and compliance information ... and to be able to use that information in enforcement actions,” Earthjustice Comments 2010 at 17, JA_____, and that waiving Title V effectively cuts citizens out of the enforcement regime. *Id.* Indeed, whereas Title V requires reporting of “reliable data” that is “representative of the source’s compliance with the permit,” 40 C.F.R. § 70.6(a)(3)(i)(B), the area-source boiler rule requires only a “statement of whether the source has complied” without supporting data or analysis. *Id.* § 63.11225(b)(2). Under the boiler rule, annual compliance certifications need be submitted only “upon request” of the permitting authority, and likewise do not include emissions data. *Id.* § 63.11225(b). The rule requires submission of test results to EPA when a performance test is conducted, but performance tests are easy for sources to avoid.¹⁶ In sum, only Title V furnishes citizens with information and data necessary for enforcement of the rule’s requirements, and exempting sources from Title V deprives them of this information.

¹⁶ Virtually all existing boilers avoid performance tests because they are not subject to any numerical standard. Existing area-source coal boilers are subject to a mercury limit, but even these can avoid performance tests by choosing to demonstrate compliance through fuel testing instead. *Id.* § 63.11220(c). New area-source boilers are subject to a numerical standard for particulate matter as a surrogate for hazardous metals, but they are authorized to go three years between tests. *Id.* § 63.11220(a). Any unit that comes in below one-half of the limit during its first test is exempt from all future performance tests. *Id.* § 63.11220(b).

In a response apparently written before EPA made the decision to reverse course, EPA agreed with the commenters about the “additional public participation and compliance benefits provided by title V permitting.” Response to Comments 2011 vol. 2 at 17, JA____. EPA stated these additional benefits are “need[ed]” for “major sources that became area sources as a result of installing a federally enforceable control device on a boiler after November 15, 1990.” *Id.* But EPA simultaneously exempted the very same area sources from Title V. EPA made no attempt to reconcile its acknowledgement of the compliance benefits of Title V, or its determination that they are “need[ed]” for these sources, with its ultimate conclusion that the benefits of Title V are “minimal or non-existent” for all area-source boilers. Thus EPA “has failed to offer the rational connection between facts and judgment required to pass muster under the arbitrary and capricious standard.” *State Farm*, 463 U.S. at 56. Moreover, EPA’s reasoning “is internally inconsistent and therefore arbitrary.” *Bus. Roundtable v. SEC*, 647 F.3d at 1153.

EPA also acknowledged, at proposal, the risk of controlled synthetic area-source boilers emitting above the area-source level, and concluded that risk is an “important” reason not to exempt them from Title V. *Supra* at 22. Indeed, the area-source boiler rule does not enable the public or the regulatory authority to determine area-source boilers’ actual emissions. It merely requires a “brief description” by the source of the “types of hazardous air pollutants emitted,” and a

conclusory “statement of whether the [source is major or area].” 40 C.F.R.

§ 63.9(b)(2)(iv)-(v). Title V, by contrast, requires a description of emissions

“sufficient to verify which requirements are applicable to the source,” *Id.*

§ 70.5(c)(3)(i), along with reports of subsequent monitoring data. *Id.*

§ 70.6(a)(3)(i).

EPA provided no basis for reversing its conclusion that, for just these reasons, the participation of controlled synthetic area-source boilers in Title V is not unnecessary but “important.” The one reason EPA offered for changing course—that controlled synthetic area sources have “a legal duty to use their control equipment,” 76 Fed. Reg. at 80,538/3, JA_____—betrays a complete failure to understand the function of Title V. Title V is an enforcement tool, created by Congress to “assure compliance” with the Clean Air Act’s legal requirements. 42 U.S.C. § 7661c(a). The mere existence of a “legal duty” to use control equipment does not speak to whether it is “unnecessarily burdensome” to facilitate enforcement of that duty or of the distinct duty to actually maintain emissions below the major-source threshold. Thus EPA has failed to “explain how its position can be reconciled with the statutory provision.” *Mountain Commc’ns*, 355 F.3d at 648-49 (pronouncing action arbitrary).

CONCLUSION

For the foregoing reasons, Petitioners respectfully request that the challenged rules be remanded with instruction that EPA issue revised rules free of the defects identified above. Petitioners also request vacatur of the Title V exemption for boilers that become synthetic area sources by installing controls.

DATED: August 26, 2014

Respectfully submitted,

/s/Neil Gormley

Neil Gormley

James S. Pew

Earthjustice

1625 Massachusetts Ave., N.W.

Suite 702

Washington, D.C. 20036-2212

(202) 667-4500

ngormley@earthjustice.org

jpew@earthjustice.org

Counsel for Environmental Petitioners

CERTIFICATE REGARDING WORD LIMITATION

Counsel hereby certifies that, in accordance with Federal Rule of Appellate Procedure 32(a)(7)(C), the foregoing Proof Opening Brief for Environmental Petitioners contains 10,026 words, as counted by counsel's word processing system, and thus complies with the applicable word limit established by the Court.

DATED: August 26, 2014

/s/Neil Gormley
Neil Gormley

CERTIFICATE OF SERVICE

I hereby certify that on this 26th day of August, 2014, I have served the foregoing **Proof Opening Brief for Environmental Petitioners** on all registered counsel through the Court's electronic filing system (ECF).

/s/ Neil Gormley
Neil Gormley